The Indian Poultry Gazette.

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EDITORIAL NEWS.

Owing to various circumstances we have been asked to announce that the All-India Poultry Exhibition will be held on the **4th and 5th January next,** not the 3rd and 4th as previously advertised. The date for closing of entries has also been advanced to the 17th instant, to give further opportunity to exhibitors.

At present, we have no idea of the number of entries to expect, but we would ask all keen fanciers (no matter the distance) to send birds along. If you cannot send birds, send along a donation towards the Show Expenses of presenting more awards (a Cup is a suitable gift!)

We beg to advise all members of the Club and readers of the Gazette that Mr. A. O. Foden has kindly relieved us of our duties as from the 1st January, and all correspondence should, in future, be addressed direct to him, his address being, Narayangunj, East Bengal.

It is with real regret that we have had to decide on this step of handing over. Our three years in office has been very pleasant indeed. We have made numerous friends, gained a better insight on Poultry matters and, we trust, helped everybody along the right road to success. We readily admit that we have not pleased every one of our numerous correspondents, but believe us, when we say that whatever we have done, we have done in the interest and development of the industry in general.

The financial situation is not as good as we would wish. Gazette receipts were nearly Rs. 1,500 less than last year, whilst the Club receipts have been reduced by 300. The result of this is that we have barely made a credit on the years' working. We can quite understand, that owing to the great trade depression in India advertisers have not had money for advertising, this aolne accounting for nearly Rs. 550, but what we can not understand is why the Gazette subscriptions should have dropped.

The only way we can hope to increase our sales, is for readers to make known to their friends that there is a publication called The Indian Poultry Gazette. The task of the Honorary Editor is not simple we can assure you. All his spare hours are given over to keeping both the Gazette and Club alive and from sinking into bankruptcy. If readers will only give a little more thought to this question, we are sure that there would be a great increase, as none of us would care to know that the Gazette had to cease owing to lack of support, and, may we add, lack of interest.

To all those kind people who have helped us to carry on, we tender our sincerest thanks, and ask that that same support be given to our successor in office. "Progress" and "Poultryman" have been our greatest help, not forgetting "Wayfarer" and the United Province Poultry Association and, since last January, "Buff Rock". If it had not been for these we should have had to close up long ago. We have no doubt that there are numerous readers who have

(See on next page).

POULTRY BREEDING.

By "Poultryman."

By Poultry Breeding is meant the science which treats of the reproduction and improvement of the domestic fowl. It may be said to be both a science and an art. It is truly a science in so far as it deduces and systematically applies facts and principles as they are demonstrated. It is an art in so much as the knowledge and experience thus acquired and the principles deduced may be utilized for the continued improvement of the animals.

Breeding is not an art which can be learned entirely from books or from the study of results obtained by a few crossings or matings; it is acquired by experience and by the actual study of the progeny resulting from such mating generation after generation, and in large numbers. To be successful one must be familiar with the subject from both points of view, theoretical and practical. It is impossible to apply principle to a profitable use until they are thoroughly understood. These scientific principles have, in great measure, been derived directly from the methods of the more successful breeders, and hence are fundamental.

The breeding of poultry in a practical way has been left almost entirely to the fancier, who keeps a small number of birds and aims to secure colour pattern rather than utility qualities. This tendency is changing in recent years, and the value of well-bred birds for egg production and market poultry is becoming better appreciated.

Many of our most successful breeders still believe that improvement can be best brought about through feeding, and that selection, when practised, is not rigid enough or along the lines which would insure direct improvement.

The birds of any flock, wherever kept for profit, should be considered and treated as machines—living machines, which, when given raw material in the form of food, will transform it into furnished agricultural products, such as eggs and meat. These manufactured products represent great value in small bulk, and can be sent great distances at little cost.

In the production of market eggs this concentration of the finished product is very noticeable. One dozen eggs weighing about 24 ounces ($1\frac{1}{2}$ lbs.) contain more human food material than the same weight of milk.

Composition of Eggs compared with Milk.

24 ounces. $1\frac{1}{2}$ lbs.	Water.	Ash.	Protein.	Carbo-Hydrate.	Fat.	Dry matter.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Eggs ...	0·99	0·18	0·16	0·00	0·12	0·45
Milk ...	1·30	·01	·05	·07	·05	·18

If the domestic hen is to be considered as a machine, and if the most profitable returns are to be realized from her, this machine must be carefully selected, and trained to the highest degree of efficiency.

If a bird of a certain type will lay more eggs in a year, of larger and more uniform size than another bird, and meets all the requirements of the egg market, this type should be given the preference by egg producers. Again, if one type or breed of fowls produces more and better flesh in a given time, hence yielding a larger return when put on the market, this particular type should be selected and improved for market poultry.

The aim should be to choose the type of machine best adapted to the desired purpose, then by breeding and selection, to develop this machine into the most economical transformer of raw material into the desired products that it is possible to secure.

(Continued from previous page).

had difficulties with their poultry. If they would only write these expriences in the columns of our journal they could be put on the correct road, and method. We sincerely hope that Mr. Howard will continue his interesting articles from England, which have been of use to us all.

Officially, we bid you all good-bye, but, although ceasing to being an official of the Club, we sincerely trust that our many acquaintances will not forget we shall always be ready and happy to further the Indian Poultry Club and Gazette. We therefore wish everybody the compliments of the season, and the very best of success at the Annual Show, and for the whole of 1931.

The foremost aim in poultry breeding should be the improvement of poultry in those qualities which have a definite market value; as increased egg production, quality and quantity of flesh growth, and perfection of colour pattern. All these qualities are associated more or less with perfection of proportion or symetry of the individual, and any improvement which is continuous and which progresses towards a given ideal will materially improve the general appearance of the progeny and conduce to uniformity.

BASIS OF VALUE IN POULTRY.

The basis of value in poultry keeping is the power of the individuals to produce a given product at a profit. The relative value of the individual depends upon its adaption to one or more particular uses and the returns which it yields above the food consumed. For example; the best laying hen is the one which converts the largest amount of food into eggs of the best quality with the least possible waste of the food consumed. While a larger consumption of food is necessary to heavy egg-production, it is not in itself a guarantee of heavy production.

The mongrel hen is often a heavy consumer of food; but, owing to the fact that her bodily functions are not developed sufficiently to turn every atom of food not required for maintenance into eggs, she does not yield a profit. A certain amount of food is required to maintain the body, and observation proves that the individual which consumes the most food in proportion to its live weight will, in the majority of cases, be the most profitable; hence the necessity of studying individuals closely, and breeding from those which possess the qualities to be desired in their young.

The record of a few noted hens show what breeding and selection will do; and also show that in order to increase the productive, or basis value of poultry, one must study the individuality of his stock, and mate from the very best, with the idea of eliminating the poorer birds and of intensifying in the progeny the desired qualities which are pronounced in the selected parents.

THE MINERAL CONTENT OF POULTRY FEEDS.

Mineral Mixtures.

By A. C. Burns.

It has for many years been realised that the mineral components of feeding-stuffs play important roles in the nutrition of the fowl, and, indeed, of all types of livestock. For some time, however, attention was focussed more in the direction of those other constituents, such as albuminioids, fats and carbohydrates, which are known to be so intimately associated with the development of flesh and muscle, of fat and with the supply of bodily warmth and energy. Later investigations soon revealed that, though most foods yielded only traces of what is termed "mineral ash," these very small quantities nevertheless constituted very important factors in relation to health and, in particular, to growth and bone formation.

It was soon found that a deficiency of mineral matter, over prolonged periods, ultimately led to stunted growth, ricket malformations in young livestock, and leg weakness in chicks, to weakened skeleton in older animals, to sterility, impaired resistance to disease, reduced hatchability in eggs and lower egg yield, etc. Further researches revealed that certain mineral components, other than the already well-known lime and phosphates, were equally essential to healthy development—components which were present in very minute, nevertheless significant quantities. Still later it was found that a number of the more commonly used feeding-stuffs were often deficient in one or more of these important minerals, particularly in lime, phosphates, chlorine and iron.

What exactly is meant by the term "mineral"? There are some fifteen chemical elements in the animal body, some of which (such as carbon, hydrogen, oxygen and nitrogen) originate mainly in the organic portion of the feeding stuffs and go to the formation of fats, starches, sugars and albuminoids. Others (such as lime, potash, soda, silicon, iron, chlorine, fluorine, phosphorus and sulphur) originate chiefly in the inorganic part of the plant or food, which, on being burnt, leaves them in the form an "ash." This ash, which in most vegetable foods

averages three or four per cent. only, contains some or all of the above mineral substances in various states of combination and quantity. It must suffice here to describe briefly the properties and functions of only the more important of these.

Lime is present in plant-ash in comparatively large amount, chiefly as carbonate (such as occurs in limestone or chalk) and as phosphate of lime. In both forms it is an important constituent of bone and, to a lesser extent, of other parts of the body. Linton estimates that a heavy-yielding pullet, averaging 200 eggs per annum, secretes in the egg shell approximately $2\frac{3}{4}$ lbs. of carbonate of lime and a further two-fifths ounce of lime in the egg. Certain classes of concentrated vegetable foods, of cereal grains and their by-products and of starchy foods such as roots are deficient in lime. Clovers, beans and peas contain appreciable amounts of lime, as also good pastures, whereas bad pasture may be markedly deficient.

Phosphates occur chiefly in combination with lime and, as such constitute some 75 to 80 per cent. of the bony skeleton of the bird. Many foods, such as roots and potatoes, are normally deficient in phosphates, whilst others (and pasture in particular) reveal considerable variation according to such factors as soil type, manuring and season. Fish, meat-and-bone, and bone meals are, of course, excessively rich in phosphate of lime. Cereals and bran contain useful amounts, as also clovers, lucerne, etc. In combination with lime it is an important constituent of the egg.

Chlorine occurs chiefly as chloride of sodium, *i.e.*, common salt, and in combination with other substances. It is an important component of the blood and plays an active part in relation to the digestive system and the gastric juices. The body requires comparatively small amounts of this element, yet, even so, there are a number of feeding-stuffs which are markedly deficient in chlorine substances, *i.e.*, roots, tubers, some cereal foods and by-products and manufactured feeds.

Sulphur occurs mainly as sulphate of lime, soda and potash and, to a much lesser extent, in combination with albuminoid matter in both plant and animal tissues. Most foods supply sufficient sulphur for the general requirements of livestock; though sulphur is incorporated in most "mineral mixtures," its beneficial effect is probably of a tonic rather than of an actual feeding value.

Iron is found in the ash of feeding-stuffs in various conditions of combination. It is important in relation to the green colouring matter of plants and to the iron-protein or haemoglobin of the blood; it occurs in appreciable amount in egg-yolk.

The animal body cannot set up a store of this essential mineral and it is important that the necessary traces be forthcoming each day from one or other of the foods constituting the ration. Anaemic conditions in livestock are generally attributed to, among other things, a deficiency of iron salts in the blood stream and, in such cases, are often traced to a pronoounced shortage of green foods. Roots, tubers, some cereal products and manufactured foods are poor in iron content.

Iodine is found as iodides in the ash it is present in most green foods but only in exceedingly minute amounts. The body as a whole contains only traces of iodine substances which, however, are concentrated in the thyroxin, which is the sectretion of the thyroid gland. Certain types of vegetation of marine origin, also cod liver oil, fish foods and oyster shell contain appreciably quantities of iodine whilst, in many commonly used feeding-stuffs, including cereal and certain manufactured products, it is entirely absent. Iodine is said to help in the more ready assimilation of nitrogen, phosphates and lime in the body and its absence is claimed to contribute to the development of goitre and allied disorders in livestock, to decreased appetite, abortion, infertile eggs, impaired breeding capabilities and lessened resistance to disease.

Silica (commonly known as sand) occurs mainly as silicates in the ash of most foods. There is not likely to be a deficiency of this component and, though it plays an important part in the plant, it does not call for discussion here. These silicates are associated with carbonate and phosphate of lime in the formation of bone, egg shell, etc.

Soda, Potash, etc., occur in the plant ash chiefly as carbonates and, in the living plant, are combined with tartaric, citric and other plant acids. As chlorides of soda and potash, etc., they occur in the blood stream, digestive tract and in various other parts of the body.

SOME THINGS TO AVOID IN CHICKEN REARING.

Endeavour to keep your chicks growing steadily right from the start. Of course if the birds are intended for your future laying and breeding stock it will not be wise to force them unduly.

Frame building foods are what you should supply. A tablespoonful of bone meal mixed in the soft food to every dozen (half grown) chickens on alternate days will be found a valuable aid to growth.

BROODER CHICKS.

It is a fatal mistake to coddle chicks in the brooder. They will do no good at all if they are allowed to stand about for hours on end in the heated chamber during the day time. The chicks should be constantly running from one chamber to the other. The sooner they can be encouraged on mother earth the better.

Chicks need a great deal of attention in the early days, but it pays in the long run. If you hope to be really successful you must have plenty of patience. Remember it is equally bad policy to drive them out of the heated chamber and close the door on them. The chances are you will find them all huddled up in the outer chamber and the weakest will have "gone to the wall." Also, unless the weather is very mild you will probably discover that a severe chilling has taken place. The evil effect will be seen in a day or so, when a severe form of diarrhoea will overcome them. If the complaint gets a good grip of the youngsters, the losses will be great, and at such a tender age very little can be done in the way of a remedy.

There is one trouble which we must be on our guard against, and that is the insect pest. Clean brooders, clean land and clean litter are three essentials. See that the drinking vessels and food troughs are scrupulously clean. These should be scalded frequently. Keep the grass quite short in the vicinity of the chicken coops. Change the coops regularly to fresh ground.

Look out for chicken ailments. Prevention is better than cure. Provide the chickens with a regular

(*See on 2nd column of next page*).

VITAMIN D FOR POULTRY.

By L. J. S.

The highly artificial conditions under which poultry are being kept to-day makes it very desirable that the all-important vitamins should be available to the birds, especially where the stock is kept in confinement.

Of the three vitamins with which the poultryman is concerned D is probably by far the most important where intensive methods are practised.

When first discovered, vitamin D was termed "Fat Soluble A Vitamin," which, when absent from the ration, caused leg-weakness, and affected the eyes.

Further investigation showed that the fat soluble A factor was really two vitamins, the absence of one causing the eye trouble, the other leg-weakness, thus we now have the two entirely separate vitamins, A and D.

Since the antirachitic vitamin D is fat soluable, it is naturally closely associated wth fatty substances in both animal and vegetable tissues, therefore, as we expect we find it in such fatty fluids as cod-liver-oil or phystostarol in plants, and it is only in such fats that the fat soluble vitamin is found. The lack of the vitamin in humans causes the very common disease "rickets," and the leg-weakness in chickens is almost an identical disease. Leg-weakness, which has caused so much trouble in raising chicks, is very largely due to a deficiency of vitamin D. The actual cause is due to the fact that mineral metabolism cannot function correctly in the absence of this vitamin in some form, therefore lime salts are no longer deposited in the bones, thus causing a general weak condition of the skeleton, as seen chiefly in the legs.

The functions of vitamin D have been found to be that of :—

1. Controlling calcium equilibrium and regulating mineral metabolism in the body; that is, the building up of bone, etc., in the body by mineral constituents.

(*See on next page*).

FOR BEGINNERS.

By "Observer".

As one becomes more conversant with the intricacies of a subject, one tends to lose sight of the importance of the elementary fundamentals, without which the specialised knowledge would never have developed. As time passes, and the scope of our knowledge widens and increases, it becomes ever more difficult for the beginner to acquire the more elementary information which is so necessary. Taking the subject of poultry keeping as an

(*See on next page*).

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2. Vitamin D is a specific against rickets.

The results of deficiency are:—

1. Muscular weakness and instability of the nervous system.

The results of absence of the vitamin are:—

1. Rickets

2. Deformity of the bones due to their inability to support the body.

The most reliable sources of the vitamin are cod-liver-oil and whole milk, from the feeding point of view.

Sythetically the vitamin may be provided to some extent by the use of a glass substitute. Quartz mercury, vapour lamp or direct sunlight, these three methods provide ultra-violet rays, which contain a very concentrated supply of the vitamin; this supply becomes available to the chick by the action of the rays upon the cholesteral in the skin, thus storing the vitamin in the body. Since, however, cod-liver-oil is the more common method used for supplying the vitamin, it is well to know the value of the oil as a factor for this supply. The value of the oil varies according to process to which it is subjected prior to its appearing on the market, or to the method employed in its extraction and preparation. The oil is obtained from the liver of various fishes, but chiefly the white-fieshed fish, the cod; it is also thought that the oil obtained from fresh liver has a higher antirachitic potency than that obtained from rotting liver. The indications are therefore that it is safe to use a medicinal cod-liver-oil rather than the cattle quality, since it is more likely to be prepotent in the antirachitic factor. I think that in any case it would be more economical to buy the higher grade from this point of view. The medicinal qualities have been physiologically tested, and the antirachitic value is known, whereas the brown or cattle oil is not usually tested. In a ration 1 per cent. medicinal is most commonly used, on the other hand it is more usual to use 2 to 2½ per cent. of the cattle quality, so it is easily seen that the medicinal quality of oil can be more economically employed, as it has a known value and only half the amount may be used, as compared with the brown or cattle oil.

The use of glass substitutes in brooding houses has become quite popular as a means of supplying the vitamin; there is no doubt that such substances have a beneficial effect upon the chicks, but it should be remembered that such substances are rather costly, have often to be replaced, and deteriorate in time in their value. It should be remembered that ultra-violet rays do not reflect; therefore, before these substances can be of any use they must be subjected to *direct* sunlight in the literal sense of the word. Dust, which is often very common in the brooder house, is liable to adhere to the glass, thus lowering its ability to allow the rays to pass through. Some substitutes may be beneficial, but further work is necessary before it can be safely employed as an economical proposition in chick rearing.

Cod-liver-oil has been found to be a safe method to employ for preventing leg-weekness; it is very important, however, to remember that the vitamin is only responsible for mineral metabolism, and that without supplying mineral in some form, it can be of little use. Even if a glass substitute is used, it would be much safer if in addition cod-liver-oil was present in the growing ration.

(*Continued from previous page*).

supply of greenstuff. Keep the drinking vessels in the shade. When the chicks are old enough give them all the free range you can. Chickens will make more rapid growth in this way, as they derive great benefit from insect life. Do not overcrowd or overfeed your chickens.

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1. **A. E. SLATER,** ***Manager.***

(*Continued from previous page*).

illustration, we can pick up any up-to-date chicken paper and find very interesting articles on advanced and debated subjects, every one of which assumes much previous knowledge. It is for this reason that this page has been inaugurated. In it we are going to deal with all poultry subjects, from their beginning, so that the absolute beginner, who knows practically nothing of poultry keeping, will be able to read it with intelligence. Not for us here is the thrill of brousing upon involved theories upon ultra-violet rays, and their effect upon poultry; upon the possibilities of feeding and breeding; upon the technical aspect of poultry diseases. We are concerned with the less interesting, but, in many ways, the more important parts of poultry keeping.

Readers of this page are invited to let me know the various points which trouble them most, so that they can be dealt with, and so, perhaps, help others. When first I began keeping poultry, I was under the pleasant, but unsound delusion that every hen laid an egg every day. I was soon disillusioned, but the experience has served to teach me never to be impatient, or contemptuous of anyone who shows an absolute ignorance of any subject of which I am fortunate enough to have a certain knowledge.

BREEDS.

When starting poultry keeping, one of the first questions which arises is which breed will it be best to keep. An hour spent running through the advertisement columns of a poultry paper reveals the amazing fact that there are literally dozens of breeds, and even more sub-varieties of them. Scarcely a year passes without a new breed being made, or imported from abroad, and it thus becomes ever more difficult to know with which breed to make a start.

Breeds can be divided into two categories; those which are of use for table and egg production, and those which are not. The later are chiefly breeds which are kept entirely for exhibition purposes and will not concern us now. Of the former there are a large number, of which the White Wyandotte, the Rhode Island Red, the Light Sussex, the Buff Rock, the Barnevelder, the Orpington, are among the most popular of the heavy, or broody breeds, while the White, Black, Brown and Buff Leghorns, the La Bresse, the Ancona, and the Minorca are the most popular of the light, non-sitting breeds.

It is unnecessary for us to go very fully into the various breeds and their standards, as these can be found in the "Poultry Club Standards," a little booklet which comes in useful on numerous occasions.

For egg production the White Leghorn, the White Wyandotte, and Rhode Island Red are much on a par, and are the breeds most generally kept. The latter two breeds make very good table birds, and have thus a certain advantage over the White Leghorn in this respect.

When selecting a breed it is of the first importance that a breed which attracts the owner should be kept. Poultry keeping profitably is not merely feeding certain foods to certain birds and then picking up the eggs. There is more, much more, in it than this, and if the chicken are to give of their best, they must have the liking and the sympathy, the attention and the understanding of their keeper. This personal feeling cannot be given to a breed which does not appeal strongly to one. Breeds have appeals all of their own, in the same way as dogs and cattle, and nobody, however experienced or inexperienced, can dispute that success in poultry keeping is largely dependent upon the keeping of the breed one likes best. When this is done poultry farming becomes a hobby as well as a business, a pleasure as well as a livelihood, and thus shows a vastly greater profit than would otherwise be the case.

EXPOSED POSITIONS.

In the course of the year we receive a large number of letters asking which is the best breed to keep in exposed and bleak positions, such as mountains and the heavy, low-lying land. It is generally considered that for heavy land and exposed positions the Buff Rock and the Rhode Island Red are the two most suitable breeds to keep.

There can be no doubt, however, that certain breeds are, by reason of their origin and constitution, a trifle more likely to do well under certain conditions than other breeds. If poultry keeping has to be carried out in a bleak position, and White Wyandottes happen to be the poultry keeper's favourite breed, then we should advise him to keep White Wyandottes.

(*See on next page*).

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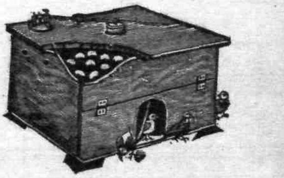

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12.

THE APPROVED METHOD OF KILLING POULTRY.

BLEEDING AND PIERCING THE BRAIN.

All birds should be allowed to fast for twenty-four hours before being killed, and during this period be given water to drink.

(Continued from previous page).

UNDER INTENSIVE CONDITIONS.

Intensive poultry keeping—the keeping of birds in their houses throughout their lives, and never letting them out— is a comparatively new method of poultry keeping. This is a subject we will deal with in later articles, but at present we are concerned with the question as to which breeds do best under these conditions.

We get a constant stream of questions on this subject, and it seems to be one on which there is little general knowledge.

It must be understood that this system of poultry keeping has not been carried on long enough to have tried keeping all and every breed under it.

The White Wyandotte and the White Leghorn are the two breeds which lend themselves most readily to the intensive system, while certain first crosses between heavy breeds or heavy and light breeds, will also give good results. There is no question but that the two above breeds are the best to keep intensively, although Rhode Island Reds, Light Sussex, and Buff Rocks have given good results under these conditions. Other light breeds tend to be rather wild, and unless the very greatest care is taken in handling them they do not tend to put up such a good production when confined to an intensive house. In the confined space they are easily frightened, and as most of us know, heavy egg production is never obtained from birds of a nervous disposition, which are frightened from time to time. For intensive work the most suitable breeds are those not over-prone to put on fat, and possessed of a placid temperament, and, being inately active, are able to keep fit in the most confined of conditions.

This will prevent decomposition of the feed remaining in the crop and intestines at killing time.

When the feed decomposes in the digestive tract, strong smelling gases are liberated, which taint the flesh of the bird; destroys its flavour and reduces its keeping qualities.

The best method of killing fowl for the market is to bleed and then pierce the brain.

The operation is simple, and efficiency will be gained by constant practice.

For the performance of the operation one of two positions is recommended.

Either place the bird on a padded bench or table or hang the bird up by the feet with a rope or cord: my experience is that the latter "modus operandi" is preferable, at any rate for novices, especially as the risk of bruising or barking the skin is minimised.

After the bird has been hung up by the feet, a small pail or cup with a sharp hook which can be attached to the beak is suitable for catching the blood.

The one end of rope or cord can be secured by a small rod or pole and to the other end a 2 inches by 2 inches block can be attached.

When hanging the bird up, it is necessary that the end of the rope with block affixed is placed around the feet and the block dropped in between the bird's feet and rope.

If this is done tying is unnecessary, and should be so fixed that the bird's feet are about on a level with the person's shoulders.

For bleeding, a sharp knife with a 3 inches blade in length or a regulation killing knife will serve the purpose.

To bleed, hold the bird's head with the thumb and forefinger just at the juncture of the neck and head or at the ear lobes, then with the third finger open the chicken's mouth.

To cut the jugular vein within the mouth, at the point where they unite at the back of the head can be accomplished by inserting the knife and put it down the throat practically the length of the blade, then with the edge of the knife turned down, cut rather heavily with a drawing stroke of the knife.

(See on next page).

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Only the very best specimens mated up for breeding.

Eggs for hatching Rs. **15/-** per dozen.

Stock available as the season advances at reasonable prices.

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12

- SITTINGS -

FROM IMPORTED STOCK.

R. I. REDS FROM SCOTT, ENGLAND.

WHITE LEGHORNS & AUSTRALORPS

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GOVERNMENT POULTRY FARM,

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Rs. 15/- for 15 Eggs.

Some good Cockerels Rs. 12/- each.

SUSSEX GROUND OATS. 56 lb. Rs. 10/-

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White Leghorns.

The finest stock available in England, landed 1st October 1930.

Cockerel whose dam and sire's dam laid 525/528 eggs in 24 months, heading a pen of 10 hens with records of 270/288 eggs in 12 months.

Eggs (2 ozs. and over)

Rs. **18**/- per dozen.

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Eggs for hatching from Best Exhibition-Utility strains.

WHITE LEGHORNS.

Pen headed by cockerel whose sire's dam had a record of 322 eggs in twelve months.

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From best strain available in India.

Eggs at Rs. **8/-** per seven eggs.

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Pills for Turkey chicks during their infancy to pull them through their infant ailments.

Apply A. G. Roberts,

3-B, Museum Road, Bangalore.

2.

LETTER TO THE EDITOR.

SIR,

Would you please publish the following few lines in the next issue of the Gazette and oblige.

The news that Mrs. Ouseley lost her Light Sussex Cockerel after the Dehra Dun Poultry Show came to me as a great shock indeed. I can say without any hesitation that this was a most beautiful Sussex cockerel. There is one thing however, which, I am sorry to learn from the letter of Mrs. Ouseley in the May Gazette, she had no knowledge of.

The Exhibition authorities tried their best to get up a separate committee for the poultry show in the District Exhibition, but received no response from those interested and those who were written to. The result was that when I reached Dehra Dun I found that the whole thing had to be done by me. I should here be failing in a moral duty of mine if I did not appreciate the efforts of Mrs. Prothero Thomas in writing many letters to likely exhibitors and getting a lot of people to enter their birds.

When I saw there was no one to help me, I myself asked the Organising Secretaries of the Exhibition to depute a veterinary surgeon on the day of the poultry show, in the Show Enclose, especially at the time of receiving the birds. This I did twice on the day preceding the poultry show and twice in the early morning on the actual day of the show. I certainly knew that there were signs of this wretched "Ranikhet" pest in and about Dehra, and therefore took every precaution that was in my power to take at the time, and under those conditions.

I need hardly mention that I myself got each pen thoroughly disinfected the night previous to the show. I also examined each bird and sent for the disinfectant after waiting for the veterinary surgeon up to 9-30 A.M. and after I found he was not forthcoming. I then myself started dipping the legs, and beak up to the nostrils of all the birds. It was after this dipping that I accepted them and penned them.

It is most unfortunate that, in spite of all these precautions, there was that great loss which Mrs. Ouselay suffered and reported. However, I am awfully sorry for the loss and wish to assure every exhibitor that it has never been nor will ever in the future be my intention to disappoint anybody. I can never be slack in taking the precautions necessary in a poultry show.

NUR-UL ISLAM,
Hon. Secretary, Asil Club.

(Continued from previous page).

If the cut is made at the proper point the bird should bleed freely.

This should be followed by the piercing of the brain, which can be done by turning the blade of the knife over and inserting the point of the blade in the slit or groove in the roof of the mouth and then quickly pushing the knife backward so as to pierce the brain.

This will be facilitated by keeping the back of the knife on a line with and touching the point of the bill.

If the chicken squawks, one can assume that the operation has been successful.

Should the bird fail to do so the brain will not have been pierced, and tight feathers and hard picking will cause annoyance to the person.

A blood-can with a small hook on the inside near the handle should be attached to the lower bill when sticking operations are completed.

The blood-can thus be caught, and the blood-can with three-quarter inch of lead in the bottom, tends to hold the bird in position.

A small stone placed in the bottom of the can would act as a good substitute.

Plucking should commence as soon as the brain is pierced and while the blood is still flowing.

The speedy removal of the feathers will depend largely upon the successful piercing of the brain.

The long wing and tail feathers should be removed first, then each side of the breast, then the legs, and lastly the back.

To pull the feathers sideways, or at an angle, instead of forward or backward, is recommended.

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INSULATE

AND POULTRY WILL PAY

EGG production can be largely increased by using CELOTEX for lining the walls and roofs of poultry houses.

Once installed, it gives poultry the permanent advantage of a much more uniform temperature with absolute insulation against extreme heat or cold, draughts and damp.

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"The Board of Health"

SOLE DISTRIBUTORS:

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CALCUTTA.

12.

? ? ?

Questions under this heading are answered free of charge on this page.

Letters should be addressed—BUFF ROCK,
C/o. The Hon. Editor, I. P. GAZETTE and marked "Query".

Where readers desire an individual reply they should enclose a stamped addressed envelope and a fee of As. -/8/- is charged.

Mrs. J. *Srinagar.*—I am afraid your scheme is not practicable. Any profit you might make in the sales would be eaten right up and beyond when it came to reckoning up transport and crating charges. I should say roughly on 100 birds the nett profit would be something like Rs. 2, would it be worth it?

Mr. L. *Berampur.*—The mash is too bulky. I suggest you rearrange it, Bran 4 parts, Fish meal 1 part, Ata 2 parts. The other items can remain as previous.

Mr. M. *Alambagh.*—If the house is to be used as a confined house and run 70 birds will be the limit. If you intend to use it as a roosting and laying house with 25 nests, three lines of perches down either side with a passageway down the centre and have sufficient ground to wire off $\frac{3}{4}$ acre of land for a run it will take 140 to 150 head without un-due crowding.

Mr. P. *Lahore.*—I have no practical experience of the Battery system but I do not think it will be a great success in this country when the heat is taken into consideration and am inclined to think mortality will be over high.

Mr. R. *Calcutta.*—This is no doubt 'vertigo' caused either by a blow on the head or from being exposed to too strong sun heat. Seperate the bird from the rest keep in a cool dry place, with no draughts, feed sparingly and add a teaspoonful of Epsom salts to every quart of water changing back to plain drinking water on 3rd day. Quietness is essential and if on 3rd day no improvement is noted add 1 teaspoonful of the following mixture to the mash. Cresote medicinal I dram, Olive oil pure 2 ozs., to be given once daily only.

Mrs. W. *Jeria.*—It is much too soon to tell if the birds are pure or otherwise. R. I. Reds more often than not show white or black feathers at that age but you will most likely find they will moult these out in their pullet moult. If not they are from an inferior strain or may possibly be crosses. (2). A fair average is eight months. (2) Tinted to dark brown.

Mr. T. *Colaba.*—The birds are no doubt being overfed. If they are able to roam about in stables all day they pick up an enormous amount of food stuff and should be fed more sparingly. Do not feed them at all one evening and when all have gone to roost go quietly along the perches and feel the crops to see now full they are. If absolutely empty then give as a last feed $1\frac{1}{2}$ ozs. per bird but you most likely will find they have got full or partially full crops and can be cut down according to your judgement.

Mr. H. *Bara Jheel.*—The sample sent is not wheat bran at all. It is the husk of gram milled to the coarseness of averages machined wheat bran and its food value is about half that of wheat bran as it contains about 30% more fibre. The actual gram kernal contents appear to be about 5% only. On the other hand it is slightly higher in oil or fat properties.

Mr. B. *Purnia.*—Red Mite Mr. B. No need for a microscope on these pests. Do out all houses with a strong solution of IZAL or Jey's etc., and when dry lime white out. Failure to penetrate one crevice will mean the same trouble all over again very soon. All birds transferred to the cleaned house be thoroughly dusted with a good insecticide first or better still dipped in a 10% solution of Izal up to the base of the skull being very careful of eyes, nose, etc.

Mr. D. B. *Jute Mill.*—As current is free then you might try it out and see the results. You need to fit a good dimming switch so that the lights go off very slowly taking about half an hour from bright to complete darkness and *vice versa* in the morning. I suggest commencing to light up about 4-15 A.M. being fully lit by 4-45 A.M. finally switching off at broad day light and switching on full at 15 minutes before sunset commencing dimming at 7 P.M. and being finally in darkness at 7-30 to 7-45 P.M. (2) An added amount of food will of course be consumed but this should be repaid or balanced by the increased egg yield.

Abdul H. *Hyderabad.*—As you say it is to be purely experimental I suggest you obtain a trio of Buff or Barred Rock females and mate them to the male referred to. This should increase laying capacity and not materially decrease weight.

Mrs. S. *Calcutta.*—Our Honorary Editor is residing in Calcutta and I suggest you get in touch with him. He would be able to give you particulars in five minutes which would take me two pages to explain. (2) The definition of 'hen' is a bird which has completed its first adult moult and is by then 12 months old. Your birds will be hens.

Individual replies posted to Messrs. Reed, Bryan, Hollis, and Mrs. Perry.

IMPORTED THIS YEAR.

Light Sussex. Settings from Winner Harper Adams Trials. 1st Prize, England.
Rs. 20/- per dozen.

White Orpingtons. 1st Prize. From Rs. 30/- a Trio. Settings Rs. 16/- per dozen.

Cockerels from these two record strains Rs. 20/- each. (8 months old.)

Mrs. M. Ward.

RED GABLES.

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JERSEY BLACK GIANTS.

Eggs from acclimated imported prize birds, excellent layers of large brown eggs.

Rs. 30/- *per dozen.*

Pullets and Cockerels available.

Standard weights.

Cock 12 to 13 lbs. approx.
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Inheritance of Fecundity in Fowls ...	4	6
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FROM THE EDITOR

INDIAN POULTRY GAZETTE.

Important Announcement.

WHITE LEGHORN EGGS FOR HATCHING.

My well-known strain of hens mated to a newly imported first-class Cock, whose dam's and sire's dam's records are 520/524 in 24 months respectively. Limited number of settings, Rs. 15/- per dozen eggs (15 sent, no replacements) packing and postage free.

Book early to avoid disappointment.

Mrs. O. B. LACEY,
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A. O. FODEN,
NARAYANGUNGE.

Orders are now being booked for this seasons matings.

White Leghorns.—Imported stock mated to progeny of imported stock winners at Calcutta.

1st Pen ... Rs 18/- per sitting.
2nd " ... Rs. 15/- " "

White Runner Ducks.—Imported stock and 1st generation of imported stock mating.

1st Pen ... Rs. 15/- per sitting.
2nd " ... Rs. 12/8/- " "

The fertility of these ducks last year was 98%. I only keep a limited number—the best—so book early.

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RHODE ISLAND REDS—Iowa State College utility strain.

TURKEYS—First class Indian bred birds.

All laying stock is pedigreed and trap-nested.

Eggs Rs. 12/- per dozen, baby chicks, young stock at reasonable prices.

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Absolute satisfaction guaranteed, See further Breeder's Card. See also larger displayed advertisement in Gazette Year Book. Further announcements will appear periodically in this Gazette.

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